

Amendment/Reply

Applicant: Martin Brox

Serial No.: 10/585,151

Filed: October 16, 2007

Docket No.: Q601.131.101/2003P53957US

Title: VOLTAGE REGULATION SYSTEM

IN THE CLAIMS

Please cancel claims 12, 20, and 23 without prejudice.

Please add claims 33-35.

Please amend claims 10, 13, 14, 17-19, 21, 26, 28, 29, and 32 as follows:

1-9. (Cancelled)

10. (Currently Amended) A voltage regulation system comprising:

an input of the voltage regulating system being presented with a first voltage having a first nominal value;

an output of the voltage regulation system having the first voltage changed into a second voltage having a second nominal value, which is available to be tapped at the output;

a first device for generating an essentially constant voltage from the first voltage, or a voltage derived from it, to provide the essentially constant voltage on a first line despite fluctuations of the first voltage above the first nominal value;

a further device for generating a variable further voltage from the first voltage or a voltage derived from it to provide the variable further voltage on a second line directly connected to the first line, the variable further voltage tracking the first voltage such that in response to the first voltage rising above the first nominal value, the variable further voltage rises in proportion to the first voltage; and

a device for activating and/or deactivating the further device to an activated and/or deactivated state,

wherein in the deactivated state, the second voltage is maintained at the second nominal value, and

wherein in the activated state, the second voltage rises above the second nominal value in response to the first voltage rising above the first nominal value.

11. (Previously Presented) The voltage regulation system of claim 10, wherein the further voltage generated by the further device can be higher than the voltage generated by the first device.

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12. (Cancelled)

13. (Currently Amended) The voltage regulation system of claim ~~42~~10, wherein the further device comprises a voltage divider circuit.

14. (Currently Amended) The voltage regulation system of claim ~~42~~10, wherein the voltage generated by the first device or a voltage derived from it, and the further voltage generated by the further device, or a voltage derived from it, can be used for controlling a voltage regulation circuit device.

15-16. (Cancelled)

17. (Currently Amended) The voltage regulation system of claim ~~42~~10, wherein, in the activated state of the further device, the height of the level of ~~the a~~ reference voltage used for ~~the a~~ voltage regulation circuit device is determined by whichever of the voltages generated by the first and further device, or the voltages derived from them, exhibits the higher level.

18. (Currently Amended) The voltage regulation system of claim ~~42~~10, wherein, in the deactivated state of the further device, the height of the level of ~~the a~~ reference voltage used for ~~the a~~ voltage regulation system circuit device is determined by the voltage generated by the first device or the voltage derived from it.

19. (Currently Amended) A method for the regulation of voltage comprising:
changing a first voltage into a second voltage, wherein the second voltage exhibits a lower voltage level than the first voltage, the first voltage having a first nominal value and the second voltage having a second nominal value;
generating an essentially constant voltage from the first voltage, or a voltage derived from it, to provide the essentially constant voltage on a first line despite fluctuations of the first voltage above the first nominal value;
generating a variable further voltage from the first voltage or a voltage derived from it to provide the variable further voltage on a second line directly connected to the first line, the

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variable further voltage tracking the first voltage such that in response to the first voltage rising above the first nominal value, the variable further voltage rises in proportion to the first voltage, wherein the further voltage can be higher than the constant voltage generated from the first voltage or the voltage derived from it; and

changing the essentially constant voltage to provide the second voltage having the second nominal value in a first state and changing the greater of the essentially constant voltage and the variable further voltage to provide the second voltage in a second state, wherein in the second state the second voltage rises above the second nominal value in response to the first voltage rising above the first nominal value.

20. (Cancelled)

21. (Currently Amended) A voltage regulation system comprising:

an input having a first voltage having a first nominal value;

an output having a second voltage having a second nominal value;

a first device for generating an essentially constant voltage from the first voltage to provide the essentially constant voltage on a first line despite fluctuations of the first voltage above the first nominal value; and

means for generating a tracking voltage from the first voltage that tracks the first voltage such that in response to the first voltage rising above the first nominal value, the tracking voltage rises in proportion to the first voltage;

a further device for generating a variable further voltage from the tracking voltage to provide the variable further voltage on a second line directly connected to the first line; and

a device for activating and/or deactivating the further device to an activated and/or deactivated state,

wherein in the deactivated state, the second voltage is maintained at the second nominal value, and

wherein in the activated state, the second voltage rises above the second nominal value in response to the first voltage rising above the first nominal value.

22. (Previously Presented) The voltage regulation system of claim 21, wherein the further voltage generated can be higher than the voltage generated by the first device.

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23. (Cancelled)
24. (Previously Presented) The voltage regulation system of claim 21, further comprising a voltage divider circuit.
25. (Previously Presented) The voltage regulation system of claim 21, wherein the voltage generated by the first device and the further voltage generated can be used for controlling a voltage regulation circuit device.
26. (Currently Amended) The voltage regulation system of claim 21, wherein the voltage generated by the first device and the further voltage generated can be used as a reference voltage for ~~the~~a voltage regulation circuit device.
27. (Cancelled)
28. (Currently Amended) The voltage regulation system of claim 21, wherein, in the activated state of the further device, the height of the level of ~~the~~a reference voltage used for ~~the~~a voltage regulation circuit device is determined by whichever of the voltages generated by the first and further device exhibits the higher level.
29. (Currently Amended) The voltage regulation system of claim 21, wherein, in the deactivated state of the further device, the height of the level of ~~the~~a reference voltage used for ~~the~~a voltage regulation system circuit device is determined by the voltage generated by the first device or the voltage derived from it.
30. (Previously Presented) The voltage regulation system of claim 10, wherein the device for activating and/or deactivating the further device comprises a register.
31. (Previously Presented) The voltage regulation system of claim 21, wherein the device for activating and/or deactivating the further device comprises a register.

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32. (Currently Amended) A voltage regulation system comprising:

a first reference voltage generator configured to generate an essentially constant voltage from a first voltage despite fluctuations of the first voltage above a first nominal value;

a first buffer configured to buffer the essentially constant voltage to provide a first reference voltage on a first line;

a second reference voltage generator configured to generate a tracking voltage from the first voltage that tracks the first voltage such that in response to the first voltage rising above the first nominal value, the tracking voltage rises in proportion to the first voltage;

a second buffer configured to buffer the tracking voltage to provide a second reference voltage on a second line directly connected to the first line;

a device for activating and deactivating the second buffer to an activated or deactivated state; and

a voltage regulator configured to provide a second voltage based on the first voltage, the first reference voltage, and the second reference voltage,

wherein with the device deactivated, the second voltage is maintained at a second nominal value, and

wherein with the device activated, the second voltage rises above the second nominal value in response to the first voltage rising above the first nominal value.

33. (New) The voltage regulation system of claim 32, wherein the first nominal value is between 1.6 Volts and 2.0 Volts, and

wherein the second nominal value is 1.5 Volts.

34. (New) The voltage regulation system of claim 32, wherein the tracking voltage is between 0.5 and 0.95 times the first voltage.

35. (New) The voltage regulation system of claim 32, wherein the tracking voltage is maintained above the essentially constant voltage in response to the first voltage being maintained above the first nominal value.